What is claimed is:

21. A stapling method for fastening a first bone segment to a second bone segment, said first bone segment having an end to be connected to an end of said second bone segment, said method including the steps of:

a) positioning the end of said first bone segment in face-to-face adjacent relationship with the end of said second bone segment;

b) providing a generally u-shaped staple having a pair of spaced apart legs with sharp free ends and other ends interconnected by a bridge portion, and said staple having an initial untensioned configuration in which said legs converge with respect to each other;

c) moving said staple from its initial configuration to a tensioned configuration in which said legs are held generally parallel to each other and in which said legs are resiliently urged towards their initial configurations;

d) holding and positioning said tensioned staple with each of the sharp ends of said legs aligned respectively with a spot on the surface of said first and second bone segments; and

e) driving and embedding the legs of said tensioned staple into said bone segments and releasing said staple, whereby the opposing faces of the bone segments are caused to be pressed into engagement with a predetermined amount of compressive force.

22. A method as defined in claim 21 wherein the step of driving and embedding of said staple legs is effected by percussion.

23. A method as defined in claim 21 wherein said step of moving said staple to its tensioned configuration includes slidably engaging opposing inner surfaces of the legs and bridge portions of said staple in its untensioned configuration with surfaces of a ramp and then moving said staple along said ramp in a direction normal to the plane in which lie said legs and bridge portion, so that said legs slidably follow surfaces of said ramp that are configured to urge said legs into parallel relationship.

24. A method as defined in claim 21 wherein said step of driving and embedding said staple legs includes slidably moving said along parallel surfaces.

25. A compression staple for fastening a first bone segment to a second bone segment, said staple comprised of a resilient material and having a generally U-shaped configuration, and comprising:

a) first and second spaced-apart longitudinally extending legs with sharp free ends and proximal ends;

b) a bridge portion interconnecting the proximal ends of said legs; and

wherein said legs have a convergent orientation, one to the other, and said legs are adapted to be resiliently held in a parallel orientation wherein said legs are urged towards their initial convergent orientation with a predetermined force.

26. A staple as defined in claim 25 wherein said legs are wider than said bridge portion.

27. A staple as defined in claim 26 wherein said bridge portion lies to one side of said legs and the other sides of said legs have opposing generally flat surfaces.

28. A bone staple applicator for a generally U-shaped staple having a first and a second spaced apart legs with sharp free ends and proximal ends interconnected by a bridge portion, and an initial configuration where said legs are convergently oriented, and said staple capable of a tensioned configuration in which said legs are held in parallel relationship, said staple applicator including:

a) an elongate body with a front end and a rear end, and including:

i) means on said body front end for supporting said staple against rearward and lateral movement with the sharp ends of its legs forwardly disposed, and adapted for engaging opposing portions said legs and moving said legs into parallel relationship.

29. A bone staple applicator as defined in claim 28 wherein said tool body has a handle portion, and said rear end is adapted for being struck a percussive blow.

30. A bone staple applicator for a generally U-shaped staple having a first and a second spaced-apart legs with sharp free ends and proximal ends interconnected by a bridge portion, and wherein said legs have an initial convergent orientation one to the other, and said staple capable of a tensioned configuration in which said legs are held in parallel relationship, said parallel legs urged towards their initial convergent orientation by certain spring force; said staple applicator including:

a) a longitudinally extending body with a front end and a rear end, and including:

i) means on said body front end for supporting said staple in its tensioned configuration with the sharp ends of its legs forwardly disposed, and adapted for engaging opposing inside surfaces of said legs and for guiding longitudinal forward movement of said tensioned staple;

ii) means for moving said staple from its initial orientation to its tensioned configuration, and for delivering said staple to said staple supporting means; and

iii) means mounted to said body for striking the rear end of said tensioned staple with percussive force for driving said tensioned staple forwardly from said staple-supporting means.

31. An applicator as defined in claim 30 wherein said striking means includes an elongate striker mounted to said body for longitudinal movement, and having a front end adapted for impacting the rearward end portion of said staple.

32. An applicator as defined in claim 30 wherein said means for supporting said staple includes opposing first and second supports adapted for engaging respectively the first and second legs of said staple, and mounted for being adjustably spread apart so as to move said legs to a parallel orientation.

33. An applicator as defined in claim 32 wherein said means for adjustably moving said supports comprises drive means, engaging said first and second supports.

34. An applicator as defined in claim 33 wherein said drive means includes drive screw mechanism.

35. An applicator as defined in claim 30 wherein said means for moving said staple and delivering said staple includes elongate ramp means adapted for slidably engaging inner surfaces of said staple legs and bridge portion, and having surfaces configured so that said legs are pushed from their divergent orientation to parallel orientation by virtue of moving said staple in a direction along said ramp in a direction normal to the plane in which said legs and bridge portion lie; and means for pushing said staple along said ramp means.

36. An applicator as defined in claim 35 including means for biasing a staple along said ramp means towards the proximal end of said ramp means.

add 22)